

## **Chapter 17.96**

### **SUBDIVISION IMPROVEMENTS REQUIRED PRIOR TO FINAL PLAT APPROVAL**

#### **Sections:**

- 17.96.010      Monuments.**
- 17.96.020      Streets.**
- 17.96.030      Utility and drainage facilities.**
- 17.96.040      Street name signs.**
- 17.96.050      Requirements for approval of final plat.**

#### **17.96.010      Monuments.**

Concrete monuments at least thirty-six (36) inches long and four inches square with a suitable center point shall be set at each street intersection on the street right-of-way line and at all corners on the plat. Except in cases where it is deemed clearly unreasonable or infeasible by the city council, these monuments shall be described in relation to the located section corners of the coordinate system of the state of South Dakota. Solid iron pin monuments three-fourths inch in diameter and twenty-four (24) inches long or suitable concrete markers shall be placed at all points on boundary lines where there is a change of direction and at all lot corners. (Ord. 386 § 1701, 2002)

#### **17.96.020      Streets.**

A.    Grading Specifications. All streets, roads and alleys shall be graded to their full widths by the subdivider so that street pavements and sidewalks can be constructed on the same level plan. Deviation from this standard due to special topographical conditions will be allowed only with the approval of the city council. Before grading is started, the entire right-of-way area shall be first cleared of all tree stumps, roots, brush and other objectionable materials and of all trees not intended for preservation. The subgrade shall be properly shaped, rolled, and uniformly compacted to conform with the accepted cross-section and grades. In cuts, all tree stumps,

boulders organic material, soft clay, spongy material, and other objectionable materials shall be removed to a depth of at least two feet below the graded surface. Rock, when encountered, shall be scarified to a depth of at least twelve (12) inches below the graded surface. In fills, all tree stumps, boulders, organic material, soft clay, spongy material and other objectionable material shall be removed to a depth of at least two feet below the natural ground surface. This objectionable matter, as well as similar matter from cuts shall be removed from the right-of-way area and disposed of in such a manner that it will not become incorporated in fills or hinder proper operation of the drainage system.

B. Minimum Pavement Widths. Pavement widths shall be measured between curbs. Minimum pavement widths to be provided are:

Parkways	12 feet for each lane
Arterials	11 feet for each lane
Collector streets	40 feet
Minor streets	27 feet
Marginal access streets	18 feet
Alleys, industrial and commercial streets	12 feet

C. Street Pavement--Minimum Street Design. The minimum street design shall consist of six inches of concrete paving (four thousand (4,000) psi compressive strength) supported on a subgrade prepared as follows:

1. Option One--Fly Ash Stabilization. Fly ash stabilized subgrade to a depth of eighteen (18) inches. Fly ash to be uniformly incorporated into the subsoil at the rate of twenty (20) percent fly ash by weight per volume of fly ash and soil mixture. Fly ash shall meet ASTM Specification C-618, Section 3.2, Class "C" designation containing a minimum of twenty-five (25) percent CaO. Subgrade shall be pulverized, Class "C" fly ash added, mixed, and compaction of the mixed materials. The initial compaction shall be achieved using a vibratory pad foot roller with a minimum operation weight of twelve (12) tons and a minimum centrifugal force of twenty-four (24) tons. Rubber tire or smooth-wheel rollers shall be used for final compaction of the stabilized section. Recomposition of the mixture after cure shall not be allowed. This option shall not be permitted when the soil temperature is less than forty-five (45) degrees Fahrenheit for a twenty-four (24) hour period after the fly ash is incorporated.

2. Option Two--Granular Base. Compacted nine-inch base of clean well graded gravel meeting SD-DOT Standard Specifications for Roads and Bridges, Section 882 for gravel cushion

adjusted to reduce the maximum percent of material passing the No. 200 sieve shall not exceed five percent. The nine inch base shall be sloped to and hydraulically connected to a longitudinal drain (four inches minimum diameter) and a surface outfall protected from stormwater backflow. The base shall be compacted to ninety-eight (98) percent of Relative Laboratory Density as determined by ASTM D 698. The natural soils under the granular base shall be firm, unyielding, and compacted to ninety-eight (98) percent of the Relative Laboratory Density as determined by ASTM D 698.

No topsoil, vegetation, or other deleterious materials shall be contained under pavements. All streets shall be constructed in accordance with the latest edition of the South Dakota Department of Transportation Standard Specifications for Roads and Bridges.

D. Curb and Gutter. Curb and gutter shall be provided in all subdivisions. Curbs shall not be less than six inches in height and shall be constructed of Portland concrete cement or bioluminescent concrete. Back fill shall be higher than the curb and shall slope toward the curb in order to insure that surface water drains into the storm drainage system.

E. Sidewalks. For the safety of pedestrians in residential and commercial subdivisions, sidewalks constructed of Portland concrete cement shall be constructed on each lot one foot from the lot line on both sides of the street to meet the following specifications:

1. Single-family or duplex housing developments: four feet wide and four inches thick;
2. Multi-family or group housing developments: five feet wide and four inches thick;
3. Commercial developments: eight to ten (10) feet wide and four inches thick. (Ord. 386 § 1702, 2002)

#### **17.96.030 Utility and drainage facilities.**

A. General. Sanitary sewer, storm sewer, water distribution, electrical gas, telephone and communications, cable, and all other utility lines shall be installed in rear lot easements wherever practical. Where it is impractical to install such utility lines in rear lot easements, they shall be installed within the unpaved portions of the street right-of-way except for sanitary and storm sewer lines which may be installed in the paved portion of the street right-of-way if it is impossible to install them in the unpaved portion.

When it is impossible to install sanitary and storm sewer lines in the unpaved portion of the street right-of-way all such utility lines, including service connections shall be completely installed, and inspected and approved by the land use administrator, following the grading of the street and prior to the application of any pavement base.

Where sanitary and storm sewer lines are to be installed in the unpaved portion of the street right-of-way, the installation of service connections may be delayed, provided, that at such time as these service connections are installed, they may be installed without breaking or weakening the existing pavement. Where rock is known to exist beneath the pavement area at such depth as to interfere with the installation of service connections, the complete installation of service connections shall be required prior to the application of any pavement base.

B. Water Supply Improvements. Where the public water supply is reasonably accessible or available to the proposed subdivision, as determined by the city council, a complete water distribution system that shall adequately serve all lots, which shall include appropriately spaced fire hydrants, and which shall be properly connected with the public water supply system, shall be installed. Where a public water supply system is not reasonably accessible to the subdivision, alternate water supply facilities approved by the city council shall be installed. Where individual lot wells are to be installed, lot dimensions shall meet the approval of the city council. In any case water supply facilities shall be installed as required by standards and specifications as approved by the city council.

C. Sanitary Sewer Improvements. Where the public water supply is reasonably accessible or available to the proposed subdivision, as determined by the city council, a complete sanitary sewer system which shall adequately serve all lots and which shall be properly connected to the public sanitary sewer system is not reasonably accessible to the subdivision, alternate sanitary sewer facilities, which shall be approved by the city council, shall be installed. In any case, sanitary sewer facilities shall be installed as required by standards and specifications as approved by the city council.

D. Storm Drainage. An adequate drainage system, including necessary open ditches, pipes, culverts, intersectional drains, drop inlets, and bridges for the proper drainage of all surface water, shall be installed. Cross drains shall be provided to accommodate all natural water flow, and they shall be of sufficient length to permit full width roadways and the required slopes. (Ord. 386 § 1703, 2002)

#### **17.96.040 Street name signs.**

The city council shall require the installation of durable street name signs at all intersections. (Ord. 386 § 1704, 2002)

#### **17.96.050 Requirements for approval of final plat.**

No final plat of any subdivision shall be approved unless:

- A. The improvements listed above have been made and satisfactorily installed and approved by the city council prior to such final plat approval;
- B. The subdivider shall enter into a contract with the city to insure completion of the improvements listed in Sections 17.96.020 and 17.96.030 by the subdivider within one year. The performance of the contract shall be secured by the subdivider filing with the city a performance surety bond in an amount equal to one and one-quarter times the cost of making such improvements, as estimated by the city, conditioned upon the payment of all construction costs incurred in making such improvements by the subdivider, and all expense incurred by the city for engineering and legal fees and other expense in connection with the making of such improvements in order to insure construction of the improvements in a satisfactory manner;
- C. The subdivider agrees with the city and the city may construct those improvements listed in Sections 17.96.020 and 17.96.030, and assess the cost thereof against the property benefited; or
- D. A tax incremental district pursuant to SDCL 11-9 has been created for the land area which the subdivider desires to plat and the subdivider has entered into a contract for private development, on terms and conditions acceptable to the city to insure completion of the improvements listed in Sections 17.96.020 and 17.96.030. (Ord. 386 § 1705, 2002)